

### **Abstract**

This invention provides recombinant murine leukemia virus reverse transcriptases, genes encoding these proteins and expression methods. The said murine leukemia virus reverse transcriptases are a series of MLV-RT proteins wherein the 84th amino acid residue (Q84) from the N-terminus is replaced with amino acid X, which is an amino acid with a side chain shorter than glutamine. The said murine leukemia virus reverse transcriptases have higher enzyme activity and processivity than the wild type enzyme, and are expected to be widely used in the field of biotechnology for cDNA synthesis.